From boatanchors@theporch.com Fri Jan 17 14:51:11 1997
From: Jeffrey Herman <jherman@hawaii.edu>
Subject: Re: 3rd overtone xtals
Message-ID: <Pine.GSO.3.93.970117071939.129B-100000@uhunix3>

Thank-you to all who replied to my query; some said yes (they will operate on the fundamental), others said no.

The project is a converter; I'm using a 150mhz xtal on it's 40 meg fundamental (subtract the IF) to run an oscillator; the osc will be fed into a mixer whose input will be 2m - output will be 100 megs and fed into an FM bcst band tuner so I can listen to the 2m rptrs on my FM music radio.

Even if it doesn't work, it's still fun to play around with the soldering gun...

73 from chilly Hawaii (went down to 60 last night - brrrrr),
Jeff KH2PZ / KH7

From boatanchors@theporch.com Fri Jan 17 09:57:03 1997
From: Jeffrey Herman <jherman@hawaii.edu>
Subject: Re: 6146's
Message-ID: <Pine.GSO.3.93.970116165345.7093I-100000@uhunix3>

On Thu, 16 Jan 1997, Jim Garland W8ZR wrote:
> Any tube that falls below the minimum
> acceptable rating (e.g. 60%), I throw away, ...

I wonder - should we be throwing tubes away? Who knows, maybe someday some tube lover will start up a business of rebuilding tubes. After all, supplies will eventually cease to exist (scary thought!) and at that point, we'll either have to conform and buy modern day rigs, or have someone rebuild our bottles.
Jeff KH2PZ

From boatanchors@theporch.com Fri Jan 17 09:57:03 1997
From: John Shriver <jas@shiva.com>
Subject: Re: 6146's
Message-ID: <199701171448.JAA00279@shiva-dev.shiva.com>

I sent someone on this list copies of the RCA HB-3 pages on the entire 6146 family. I think they were planning on webbing them. Progress?

From boatanchors@theporch.com Fri Jan 17 09:57:03 1997
From: DCPIN@aol.com
Subject: 6146's -Thanks
Message-ID: <970116222911_645928506@emout20.mail.aol.com>

This list is great. Thanks to all that answered my question. I am taking the numbers on the boxes (which were handwritten) to be the results of tube testing on a TV-7. Which brings me to a big want. I have looked around everywhere I know to look and every time one of these is available I seem to miss it. If I want to continue to play at being a tubester I need a TV-7.
 Any help from this group be it by sell, trade, gift, loan, etc would be appreciated.
BTW I got the 6146's on a internet auction 5 for $25 from a private individual.

Also about receivers. Reading all the receiver threads got me nostalgic and I bought an NC-155 just because I had one as a teeneager. However the best receiver I had was the Drake R4B. I am being emotionally moved to buy one as I write. I hope it passes. This tube stuff and mixed with a high dose of nostalgia could be addicting.

While I am venting, I really enjoy reading all the philosophical and technical approaches to the engineering, fixing and restoration of different projects. Although a great deal of this is way over the head of this ham, I think I'm learning new things .
I wish I could take one of those adult life learning classes in troubleshooting and the proper use of meter and scope.

If old dogs can learn new tricks I could use a couple.

Thanks and regards..........Chris KO4QW

From boatanchors@theporch.com Fri Jan 17 14:51:11 1997
From: km1h@juno.com
Subject: Re: 6146's; how to rejuvenate
Message-ID: <19970117.130216.7095.8.km1h@juno.com>

--------- Begin forwarded message ----------
From: km1h
Subject: Re: 6146's; how to rejuvenate

From boatanchors@theporch.com Fri Jan 17 20:40:33 1997
From: rdkeys@csemail.cropsci.ncsu.edu
Subject: Alaska Steam Co old times
Message-ID: <9701172306.AA124680@csemail.cropsci.ncsu.edu>

Hue, et al

My dad sailed on some coastwise rustbucket for the ``Alaska Transportation Co.'', back about the start of WWII.   He told me a story of a trip up to Alaska and back on one vessel that the equipment was still the early IP-500 style thingie with the outboard audio box, and an arc converter. He was so pissed off after that run that he wrote a letter to the FCC rather pointedly suggesting that they get those old junk sets OFF the vessels in the modern ``1940'' era.  Then he promply went out on a ``modern'' vessel with modern gear. He told me that they did wind up changing out all that old gear rather quickly after that. I would be very curious to see the work logs etc., that you have, for the historical background of those changeouts. Maybe there is some common history there.

The non-rf stage regens were prone to rf radiation, but the trf sets (of which the RAL is the premier example) are as quiet as a mouse. Only IF I crank up the Collins gear on the same antenna coax of the RAL (via a T connector) will I ever so faintly hear the oscillator beat note. I have serious doubts that they could be heard with an offsite receiver, like on a sub. Conversely, the single detector, direct to the antenna system will radiate several miles under good conditions, even now, but it would be rather hard to pick up, especially on 500khz, at any distance beyond that.

RBB/RBC/RBA/RAL..... They are all fine heavyweight iron for receivers, if ye knows how to gets de ol' mileage outta them thar things..... Built like battleships, easy to work on, once you get used to the floating bandswitches, and always nice filters for CW, at IF/RF/Audio. Good stuff....!

Interestingly, the RBA is NOT a regen but is a true heterodyne receiver. That would put out a trace of signal, if the trf stages were not ahead of the detector. Superhets are quite noisy on the low bands. The straight regens and heterodynes are amazingly quite down there. That is why they were in use for so many years, ... simple, reliable, and they worked well (still do!). Even the postwar regens used as emergency sets are not half bad, although they don't usually compare with modern superhets. The old Mackay regens were quite good. The RMCA regens are also quite good. I have not played with the last modern transistor regens from Mackay tho. That might be fun to compare with the ancients, if I could ever find one.

Yeah, I knows, me is well stuck with them thar regenerators, but for good reason. They still work like gangbusters on CW. And, they is prime BA ironmongers heavyweight mettle.

73/ZUT DE NA4G/Bob UP

From boatanchors@theporch.com Fri Jan 17 20:40:33 1997
From: William Donzelli <william@ans.net>
Subject: Re: Alaska Steam Co old times
Message-ID: <199701172225.AA26920@interlock.ans.net>

> Interestingly, the RBA is NOT a regen but is a true heterodyne receiver.

Oops, sorry about the confusion...you are correct.

William Donzelli
william@ans.net

From boatanchors@theporch.com Fri Jan 17 20:40:33 1997
From: "Roberta J. Barmore" <rbarmore@indy.net>
Subject: Re: Alaska Steam Co old times
Message-ID: <Pine.SUN.3.91.970117200638.2377B-100000@indy1>

Hi!

Okay, the RBA is a heterodyne receiver not a regen or a superhet--next questions, what's a hetrodyne receiver? Kin to a direct-conversion rx? I'm puzzled!

73,
--Bobbi

From boatanchors@theporch.com Fri Jan 17 14:51:11 1997
From: "Cliff Blakey" <Cliff.Blakey@dns.cyberlink.bc.ca>
Subject: Ansen aircraft
Message-ID: <199701171620.JAA23804@dns.cyberlink.bc.ca>

Hi, fellow BA'ers;
Do any of you know what radio equipment was in the Ansen in WW2. I have a friend who is rebuilding one and would like to keep it as original for that era.
Sincerely
Cliff Blakey

Western Wireless Company:
112C Van Horne St.,"5th Ave. Plaza"
(Box 398 Cranbrook, B.C. V1C 4H9 Canada)

Tel/Fax 250-489-5874
Cliff Blakey
VE7WWC
cblakey@cyberlink.bc.ca
Please visit our "Antique Radio Store"
at:
http://www.cyberlink.bc.ca/~cblakey/
Preserving Yesterday's Wireless Heritage.

From boatanchors@theporch.com Fri Jan 17 14:51:11 1997
From: Mike Toneri <toneri@ils.net>
Subject: Re: Ansen aircraft
Message-ID: <199701171717.MAA09996@server1.ils.net>

At 10:28 AM 1/17/97 -0600, Cliff Blakey wrote:
>Hi, fellow BA'ers;
>Do any of you know what radio equipment was in the Ansen in WW2. I
>have a friend who is rebuilding one and would like to keep it as
>original for that era.
>Sincerely
>Cliff Blakey
>
You might want to contact the Canadian Warplane Heritage Museum, P.O. Box 35, Mount Hope, Ont, L0R1WO, 905-679-4183. They have an Anson aircraft and may have the info you need.

The National Aviation Museum, in Ottawa would probably have the info as well. Tel number is 1-800-463-2038.

73...Mike VE3FGU

****
Mike & Lynda Toneri   E-mail: toneri@ils.net
****

From boatanchors@theporch.com Fri Jan 17 09:57:03 1997
From: Tom Norris <badger@telalink.net>
Subject: AT-1028 PRC-25 df loop GONE
Message-ID: <3.0.32.19970117090736.006aaa60@telalink.net>

Thanks for all the replies. I will offer other stuff from time to time, so who knows. I may end up finding more of these at the "Secret BA Warehouse" trip I am going ot make when it warms up a bit.
I hope to find enough stuff there to make both BA and VSS lists happy!

73

Tom

Visit my web site with info on military communications gear:
HTTP://telalink.net/~badger/millist/index.html

Am in the middle of reorginazing this page, so if you see any glaring (or not) errors, lemme know!

****
 Tom Norris KA4RKT
 badger@telalink.net   Nashville, Tennessee, USA
 thermionic@techie.com

****

From boatanchors@theporch.com Fri Jan 17 09:57:03 1997
From: Eugene Rippen <soundval@foothill.net>
Subject: BA Freq. Crystals
Message-ID: <32DF1160.42F7@foothill.net>

This is a multi-part message in MIME format.

--------------1C691F5E18DF
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Someone (I misplaced the post) requested that I make up a chart of crystals that could possibly be used with multipliers for the BA frequencies I had previously posted. SO, I let my computer do just that:

--------------1C691F5E18DF
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Disposition: inline; filename="CRYSTALS.DOC"

```
 OP FREQ      X2      X3      X4      X6      X8     X12     X18     X24
--------------------------------------------------------------------------------
  7.0500  3.5250  2.3500  1.7625
  7.1116  3.5558  2.3705  1.7779
  7.2400  3.6200  2.4133  1.8100
  7.2500  3.6250  2.4167  1.8125
  7.2900  3.6450  2.4300  1.8225
  7.2950  3.6475  2.4317  1.8238
 14.0500  7.0250  4.6833  3.5125  2.3417
 14.2500  7.1250  4.7500  3.5625  2.3750
 14.2630  7.1315  4.7543  3.5658  2.3772
 14.2740  7.1370  4.7580  3.5685  2.3790
 14.2750  7.1375  4.7583  3.5688  2.3792
 14.2860  7.1430  4.7620  3.5715  2.3810
 14.2900  7.1450  4.7633  3.5725  2.3817
 14.2930  7.1465  4.7643  3.5733  2.3822
 21.4250 10.7125  7.1417  5.3563  3.5708
 28.1000 14.0500  9.3667  7.0250  4.6833  3.5125
 29.0000 14.5000  9.6667  7.2500  4.8333  3.6250
 29.1000 14.5500  9.7000  7.2750  4.8500  3.6375
 50.1250 25.0625 16.7083 12.5313  8.3542  6.2656  4.1771  2.7847  2.0885
 50.4000 25.2000 16.8000 12.6000  8.4000  6.3000  4.2000  2.8000  2.1000
 50.5250 25.2625 16.8417 12.6313  8.4208  6.3156  4.2104  2.8069  2.1052
 50.5800 25.2900 16.8600 12.6450  8.4300  6.3225  4.2150  2.8100  2.1075
144.0000 72.0000 48.0000 36.0000 24.0000 18.0000 12.0000  8.0000  6.0000
144.1000 72.0500 48.0333 36.0250 24.0167 18.0125 12.0083  8.0056  6.0042
144.1100 72.0550 48.0367 36.0275 24.0183 18.0138 12.0092  8.0061  6.0046
144.2000 72.1000 48.0667 36.0500 24.0333 18.0250 12.0167  8.0111  6.0083
144.3000 72.1500 48.1000 36.0750 24.0500 18.0375 12.0250  8.0167  6.0125
144.4000 72.2000 48.1333 36.1000 24.0667 18.0500 12.0333  8.0222  6.0167
144.5000 72.2500 48.1667 36.1250 24.0833 18.0625 12.0417  8.0278  6.0208
144.6000 72.3000 48.2000 36.1500 24.1000 18.0750 12.0500  8.0333  6.0250
144.7000 72.3500 48.2333 36.1750 24.1167 18.0875 12.0583  8.0389  6.0292
144.8000 72.4000 48.2667 36.2000 24.1333 18.1000 12.0667  8.0444  6.0333
144.9000 72.4500 48.3000 36.2250 24.1500 18.1125 12.0750  8.0500  6.0375
145.0000 72.5000 48.3333 36.2500 24.1667 18.1250 12.0833  8.0556  6.0417
146.0000 73.0000 48.6667 36.5000 24.3333 18.2500 12.1667  8.1111  6.0833
147.0000 73.5000 49.0000 36.7500 24.5000 18.3750 12.2500  8.1667  6.1250
148.0000 74.0000 49.3333 37.0000 24.6667 18.5000 12.3333  8.2222  6.1667
```

--------------1C691F5E18DF--

From boatanchors@theporch.com Fri Jan 17 09:57:03 1997
From: Eugene Rippen <soundval@foothill.net>
Subject: Re: best 30s receivers
Message-ID: <32DEF797.518E@foothill.net>

I have to get into this.

I have the following receivers up and running.
Collins 75A4
TMC GPR90
Drake 2B
National NC183D
Hallicrafters SX15
Hallicrafters SX23
Hallicrafters SX24

The Hallicrafters SX-24 is the most stable and most sensitive. (A fluke?)
The Hallicrafters SX-23 the TMC GPR90 are the prettiest.
The TMC GPR90 sounds the best on both AM and SSB (I have the adapter)
I expect it will be my best all around once I get it stable and aligned. It wanders about 45Khz over the first 4-5 hours.

However, right now, all around, the Drake 2B, Collins 75A4, Hallicrafters SX-24 and National NC183D (not good SSB) are equally good operating, when connected to a sufficient antenna. The SX-24 works by far the best if the antenna is only a wire thrown across the shop area. I don't know how come my SX-23 does not operate as well, since it is basically the same chassis as the SX-24. But like I said I think the good playing of the SX-24 is a fluke.

I have not yet fired up my Hammarlund SP-400, National HRO-50, Drake R4C nor my RME-45 (In bad need of shop space for these and others.)

I'm curious, to hear from those who have made SIMULTANEOUS comparisons between GPR-90 and any one or more of 75A4, 2B and/or NC183D. Are my high expectations for it to be granted?

Gene

From boatanchors@theporch.com Fri Jan 17 09:57:03 1997
From: Stephan Sykes <ssykes@emirates.net.ae>
Subject: RE: best 30s receivers
Message-ID: <01BC0459.31309840@csf006.emirates.net.ae>

Maybe the coil plugins were 20s technology, but the HRO was stable as a rock. The ones I own still are. Great audio too. The crystal filter is touchy, but as one of the first single signal receivers, it works well.

Steve Sykes
kd2om, Abu Dhabi, UAE

----------
From: Ho4bart@aol.com[SMTP:Ho4bart@aol.com]
Sent: Thursday, January 16, 1997 7:19 PM
Subject: re: best 30s receivers

well even in this decade you have quite a difference in technology from early 30s to late 30s, starting with mostly regen ckts and finishing with the HRO and the Hammarlund superpro.   the latest 30s equip like the Hammarlund is what i would suggest as best -- no monkeying with plugin coils (a 1920s technology) and really good variable selectivity, and direct dial readout, no lookup table. re FB-7: poor image rejection, isn't that true? and the AGSX i owned seemed to have abysmal stability. HROs are fine but plugin coils and lookup graph for finding freq? it amazes me that Nat'l carried this technology so long. well on the other hand, Hammarlund carried the old 2-dial superhet into the 70s. RAL= fun receiver, but how could this regen be better than an HRO? the audio filtering isn't that much of a bonus.
hue miller

From boatanchors@theporch.com Fri Jan 17 14:51:11 1997
From: Michael Hanz <AAFRadio@erols.com>
Subject: Big switch (SA-13)
Message-ID: <32DFCBD9.1343@erols.com>

As Jay Coward said,

> For those that collect ART-13 stuff and those who like big knife switches,

> Surplus Sales of Nebraska has one called SA-13 which is an antenna switch
> used in some ART-13 installations.

This was originally used to go between fixed and trailing wire antennas. You can see one in the photo of the B-29 radio operator's position in the Collins History book. Its function for the -13 was supplanted by a boxed up version with a rotary switch (SA-26, if I remember correctly). The later CU-32/ART-13 took care of the function for LF.

From boatanchors@theporch.com Fri Jan 17 20:40:33 1997
From: w2ec@VNET.IBM.COM
Subject: Bring gear across US/CANADA border
Message-ID: <199701172046.OAA17963@uro.theporch.com>

I'm driving to Canada tomorrow to pick up a BA receiver. Anyone had any experience with importing BA gear (50-60 years old)? Wondering what duty they'll hit me with when I bring it back across the border.

73, Ray W2EC

From boatanchors@theporch.com Fri Jan 17 20:40:33 1997
From: Randy Zelick <h2rz@odin.cc.pdx.edu>
Subject: re: Bring gear across US/Canada border
Message-ID: <Pine.PTX.3.91.970117131946.19110D-100000@odin.cc.pdx.edu>

Dear Ray,

It is virtually impossible to get any radio gear across the border. What you must do instead is ship it to a U.S. location. It must reside in that location for 12 months or more before the shipper may take possession. Now because of the BA fraternity, I will generously offer to accept the shipment and take very good care of the unit(s) for the 12 month period. I will let you know how the unit(s) work and be happy to accomodate your schedule for dropping by to pick them up.

Cheers,

=Randy=

R. Zelick
Dept. Biology
Portland State University

P.O. Box 751
Portland, OR 97207
503-725-3086, 503-725-3888 (fax)

From boatanchors@theporch.com Fri Jan 17 20:40:33 1997
From: w2ec@VNET.IBM.COM
Subject: Re: Bring gear across US/CANADA border
Message-ID: <199701180230.UAA29353@uro.theporch.com>

Thanks to the many respondents who gave me info on bringing the BA back.
Yes, it completely slipped my mind that it was US manufacture to begin with
and shouldn't be a problem. I was recalling all the troubles I've had trying
to get several cases of beer back to the cottage in the Thousand Islands
during the summer.

By the way, I'm going to Fords in Smith Falls to pick up an RBA-1, which
might be the one that was mentioned by someone else who was passing thru,
stopped yesterday and saw a WW-II era receiver in a shipping crate at Fords.

73, Ray W2EC

From boatanchors@theporch.com Fri Jan 17 20:40:33 1997
From: "Deane D McIntyre" <dmcintyr@acs.ucalgary.ca>
Subject: Re: Bring gear across US/CANADA border/ECC80 info needed
Message-ID: <9701172241.ZZ218287@ds1.acs.ucalgary.ca>

In message <199701172046.OAA17963@uro.theporch.com> writes:
>
> I'm driving to Canada tomorrow to pick up a BA receiver. Anyone had
> any experience with importing BA gear (50-60 years old)? Wondering what duty
> they'll hit me with when I bring it back across the border.
>
> 73, Ray W2EC

Should be no problem at all, assuming that the BA is American/Canadian made.
Under Free Trade duties are now very low (2-3%) to non-existant and will
go away entirely in the next year or so. In the reverse direction
(USA>Canada) we do have to pay the 7% GST (Goods and Sales Tax) which
applies to almost everything purchased in Canada as well (I even have
to pay it on my ARRL dues). If you do have a problem at the border just
send the BA to VE6BPO who will take good care of it........

On another note....anyone have specs and typical operating voltages
for a ECC80/6AB8esp. plate dissipation and max plate voltage...I
have a schematic from G4VAM for a glowbug rig using one. Not listed

in any of my toob books(RCA/GE/Sylvania).

73, Deane D McIntyre VE6BPO
Deane@deane.bio.ucalgary.ca
http://deane.bio.ucalgary.ca
BAfest page http://deane.bio.ucalgary.ca/BAfest

From boatanchors@theporch.com Fri Jan 17 09:57:03 1997
From: DCPIN@aol.com
Subject: Can anyone ID this?
Message-ID: <970116230704_1419339823@emout14.mail.aol.com>

I found the following piece advertised at auction and it doesn't appear in the RCVR'S PAST and PRESENT book. Does anyone recognize this radio by the description?

"OLD HAM RECEIVER IN EXC WORKING CONDITION STAR
COMPANY LTD,MODEL SR-700A-SERIAL NUMBER 118-4 FRONT HAS
NOISE L,AVC OFF,FAST,SLOW,BANDS-A,B,C,D,E,-3.5,7,14,
21,28,28.5,29.1,. PRESELECTOR-3.5,7,14,21,28. HEADPHONE JACK,RF
GAIN,AF GAIN,VFO DIAL,CALABRATOR METER W/ON/OFF
SWITCH,SELECTIVITY 0.5,1.2,2.5,4,KC. BFO SSB,0.5,1.2,2.5,4. NOTCH
0.5,1.2,2.5,4. FUNCTION STAND BY,AM,LSB,USB,3.5 MC LSB POWER
ON\OFF SWITCH "

Thanks, Chris KO4QW

From boatanchors@theporch.com Fri Jan 17 09:57:03 1997
From: "William B. Ross" <billross@txdirect.net>
Subject: Re: Can anyone ID this?
Message-ID: <32DF08BD.56F0@txdirect.net>

DCPIN@aol.com wrote:
>
> "OLD HAM RECEIVER IN EXC WORKING CONDITION STAR
> COMPANY LTD,MODEL SR-700A-SERIAL NUMBER 118-4 FRONT HAS
> NOISE L,AVC OFF,FAST,SLOW,BANDS-A,B,C,D,E,-3.5,7,14,
> 21,28,28.5,29.1,. PRESELECTOR-3.5,7,14,21,28. HEADPHONE JACK,RF
> GAIN,AF GAIN,VFO DIAL,CALABRATOR METER W/ON/OFF
> SWITCH,SELECTIVITY 0.5,1.2,2.5,4,KC. BFO SSB,0.5,1.2,2.5,4. NOTCH
> 0.5,1.2,2.5,4. FUNCTION STAND BY,AM,LSB,USB,3.5 MC LSB POWER
> ON\OFF SWITCH "

This is a reciever built by the Star, Ltd Company in Japan in the late

1960s. It was sold in the United States via Barry Electronics for a year (about the same time a European version of Yeasu radios were being maketed under the name of Sommerkamp)or so but never caught on.

The SR-700A had a companion transmitter(ST-700A) and they were designed to look similar to the Collins S-Line. The SR-700a was esentially a repackaged Drake 2B with a more precise frequency readout and provisions for transcieving with the companion transmitter. The ST-700A was essentially a Drake T3X with a little HT37 thrown in.

I bought both units in Akihabara (Tokyo's radio row)when I was stationed in Japan and used them for about a year before the power supply in the transmitter blew up. I was pleased with their operation and was sorry that the company did not survive. Star had designed a transceiver which was marketed by Yeasu after they bought out Star. This was the FX200 which was sold in the US through Henry Radio before Yeasu established its own presence in the US.

Bill Ross K5LLK

From boatanchors@theporch.com Fri Jan 17 09:57:03 1997
From: Karl-Arne =?ISO-8859-1?Q?Markstr=F6m_08?= 6017171
Subject: Re: Can anyone ID this?
Message-ID: <D2IQZ1XB1D*/R=A1/R=MRGST/U=KAM/@MHS.stoa.mobitel.telia.se>

Chris KO4QW wrote:

ªI found the following piece advertised at auction and it doesn't appear in
ªthe RCVR'S PAST and PRESENT book. Does anyone recognize this radio by the
ªdescription?
ª
ª"OLD HAM RECEIVER IN EXC WORKING CONDITION STAR
ªCOMPANY LTD,MODEL SR-700A-

This type designation rings a bell from my Novice years.
The receiver is a Japanese made BA ham-bands only receiver from the mid 60's.

It is a double-conversion job with a crystal-controlled first conversion oscillatorand a variable first IF using 600 kHz tuning bands ,and was quite popular in Europe
in the mid/late 60's. Electrical design and tube lineup was, as I remember, quite similar to the Trio/Kenwood JR-310, the Lafayette HA-350 and the Allied A-2516.

I'm quite sure that I can find a more detailed description if I dive deep enough in the "Old Magazine" department of the improvised "home library".

73/

Karl-Arne Markstrom
SM0AOM

kam@stoa.mobitel.telia.se

From boatanchors@theporch.com Fri Jan 17 14:51:11 1997
From: Ho4bart@aol.com
Subject: Re: Can anyone ID this?
Message-ID: <970117121839_713908544@emout09.mail.aol.com>

In a message dated 97-01-16 23:13:01 EST, DCPIN@aol.com writes:

<< "OLD HAM RECEIVER IN EXC WORKING CONDITION STAR >>

wasn't this a japanese import about 1970 or so? i remember seeing the photo in some catalog. i don't know what the exact distribution channel was. when i saw the ad, probably several years after, i wondered that so many features could be provided for this price. but it did look mechanically cheezy, like about the time of its fading into obsolesence, it would be a sorry looking used up piece of junk. maybe i overstated this- but it did not look like you were getting much styling or robust construction,
just a plain receiver with good features.   anyway, considering the rate of

change in electronics, this was probably wiser than trying to outdo the other company in styling, robust mechanics etc -- may as well make it out of lacquered cardboard, so it can just be tossed in 5 years.
hue miller

From boatanchors@theporch.com Fri Jan 17 14:51:11 1997
From: harlan@aciss2.ENET.dec.com
Subject: Collins filters ???
Message-ID: <9701171657.AA14572@us2rmc.zko.dec.com>

I have one each of:

F 455 C 31   still in the box
F 455 D 60   Used

What do these fit ? what are they worth ?

TIA Dan Harlan N8ETQ
Cleve.,Oh.

Harlan@aciss2.enet.dec.com

From boatanchors@theporch.com Fri Jan 17 09:57:03 1997
From: Eugene Rippen <soundval@foothill.net>
Subject: Correction: BA Freq. List
Message-ID: <32DEFF08.430F@foothill.net>

Thanks to Peter Brickey I have a couple of coorections to the BA Frequency list.

I am posting these now. Please send any other correction.
I plan to re-post the corrected list in its entirety after I have allowed reasonable time for corrections.

The present corrections are:
Both are for the Vinatge Calif. Earlybird Net
80M 3.835 Sunday (not Wednesday) 16:00 UT, 08:00 PST
     (not 20:00 PST) SSB
80M 3.870 Saturday (not Wednesday) 16:00 UT, 08:00 PST
     (not 20:00 PST) AM

Thank you Peter, and thanks to anyone else with corrections or additions.

Gene Rippen

From boatanchors@theporch.com Fri Jan 17 14:51:11 1997
From: Bill Sorsby <bill.sorsby@dlep1.itg.ti.com>
Subject: Re: Date Codes (was 6146's)
Message-ID: <199701171652.KAA15159@lesol1.dseg.ti.com>

At 04:52 PM 1/16/97 -0600, Jerry Proc wrote:
>
>>From what I remember, date codes on devices have been in the format: "Year/
>Week of Year" which is opposite to what you are saying. Example 8312 - It was
>built in the 12th week of 1983. Before we start propagating bad data about
>date codes, I have a question:
>
>Was the year/week of week/year syntax changed at some point in time? Since
>1970, I can only remember the Year/Week syntax.

Oops! I may have erred twice here; first misinterpreting the original question (which had nothing to do with date codes) and then transposing the date code format. Sorry for any confusion.

Jerry, I've never given a thought as to which number comes first in the date code although it kinda seem like I've seen it both ways. But then, perhaps not...

Regards,
Bill Sorsby, N5BU

```
**************************************************
bill.sorsby@dlep1.itg.ti.com
Views expressed herein are no one's fault but mine.
**************************************************
```

From boatanchors@theporch.com Fri Jan 17 20:40:33 1997
From: jproc@bellglobal.com
Subject: Re: Date Codes (was 6146's)
Message-ID: <Chameleon.4.01.2.970117134655.jproc@>

Hi Bill,

If you look at any IC, the date format is always in the form of 'YearWeek'. This is how I have always remembered it as far back as 1970.

As for tubes, I rarely see date codes on tubes and only occassionaly on boxes. Military type tubes were packaged in plain white boxes and stamped with date codes. The VT-25 sitting on my desk here at work has the format Month-Year (ie 8-60). I clearly remember seeing this same format on a few other tubes. I would conclude that there were two date code formats in use.

On several occassions date code references have been very useful, especially when a manufacturer states in a service bulletin: 'replace component if date code is 'yyww' or earlier.

Regards,

```
-------------------------------------
Jerry Proc VE3FAB
E-mail: jproc@bellglobal.com
HMCS Haida Naval Museum
Toronto, Ontario
'Looking for a 'AN/SRC-501'
-------------------------------------
```

From boatanchors@theporch.com Fri Jan 17 09:57:03 1997
From: "L. Mark Pilant - MS:ZK03-4/Y02 DTN:381-1529" <pilant@seesaw.ENET.dec.com>
Subject: RE: Differences between TV-7 suffixes?
Message-ID: <9701171322.AA00962@us2rmc.zko.dec.com>

> Well, the 7 pin one could stand replacement
> too, but I have no source for a replacement.

You should check with Antique Electronic Supply. I just ordered some from them, and as I recall the price was reasonable. (BTW, they only had the 7 pin savers.)

73

- Mark N1VQW

From boatanchors@theporch.com Fri Jan 17 09:57:03 1997
From: Tom Norris <badger@telalink.net>
Subject: RE: Differences between TV-7 suffixes?
Message-ID: <3.0.32.19970117090158.006ba360@telalink.net>

>You should check with Antique Electronic Supply. I just ordered some from
>them, and as I recall the price was reasonable. (BTW, they only had the 7
>pin savers.)

Thus far, I have found that Fair Radio only has the octal socket savers. AES has the 7 pin variety. Anyone know who might have the 9 pin version?

****
Tom Norris KA4RKT
badger@telalink.net   Nashville, Tennessee, USA
---
Eagles may soar free and proud, but weasels
never get sucked into jet engines.
****

From boatanchors@theporch.com Fri Jan 17 09:57:03 1997
From: w7ni@teleport.com (Stan Griffiths)
Subject: Re: Drake 2A vs 2B/C
Message-ID: <199701171028.CAA09083@kim.teleport.com>

>Gang,
>I have been following the thread on the best receivers
>or at least the most favorite and keep seeing the
>Drake 2B appearing quite regularly. I have a 2A
>and am well pleased with its performance for its
>small footprint and tonnage. What's the difference
>and why is the 2B the rig of choice?? The A and B appear
>to look (superficially at least) the same and the tube
>lineup also appears similar, but I have never had
>the chance to try a B.
>   Can anybody fill me in on this?
>
>   73 de Matt WB2VZS

Hi Matt,

The 2B has one more position of selectivity that is good for narrow CW operation. That is the one significant difference that I know of. I had a 2B for years and loved it.

Stan w7ni@teleport.com

From boatanchors@theporch.com Fri Jan 17 09:57:03 1997
From: Michael Crestohl <mc@shore.net>
Subject: Favorite Receiver
Message-ID: <199701171441.JAA28554@northshore.shore.net>

Hello Again:

Without going into a lot of discourse, my all-around favorites are:

51S1

R-390

TMC GPR-90 (for all-around short-wave listening)

73,

```
    .-.                                                               .-.
   /   \           .-.                                 .-.           /   \
  /     \         /   \       .-.     _     .-.       /   \         /     \
-/--Michael Crestohl W1RC ---/---\---/-\---/---\-----/-----\--mc@shore.net-\--
          \     /       \   /     `-'   `-'     \   /       \     /
           \   /         `-'                     `-'         \   /
```

`-' `-'

From boatanchors@theporch.com Fri Jan 17 14:51:11 1997
From: Eugene Rippen <soundval@foothill.net>
Subject: FS CAY-TBM 10, BIG BA
Message-ID: <32DFD94F.6C3F@foothill.net>

I am posting this for a friend.

For sale a CAY-TBM 10 transmitter..
Only 5 known to exist, 3 of which are in museums.
Uses (3) 860ís to drive an 861 final. This is CW, only one of the modulators
is know of.
It is 99% complete.
Looks like a 9 on a 10 scale.
800 pounds, will consider delivering in the 11 Western States
Has casters on the cabinet.
Designed for operation 2Mhz to 18.1Mhz.
Has 12 meters on the front, an ultimate boatancher.

You can send a SASE for more info and a copy of a picture to::
Bill Irwin
1065 Faith Dr.
Meadow Vista, CA 95722

You may also contact me, but I wonít send you anything in the mail.
I am in phone/FAX contact with Bill,. Just 10 miles away.

I believe that this is certainly unique enough to warrant accepting offers,
rather than stating a price. Also, consider the delivery problem.
Offers considered with and without tubes.

Eugene Rippen

From boatanchors@theporch.com Fri Jan 17 09:57:03 1997
From: shep shepard <shep@northlink.com>
Subject: FS COLLINS 30S-1
Message-ID: <199701171442.HAA20642@smtp.northlink.com>

I have a Collins 30S-1 serial Number 8 for sale.

In excellent working condition with the Peter Dahl Plate transformer.

Origional Manual included. Few small scratches on the side but otherwise perfect.

Best offer over $1600.

Shep AA7MH

From boatanchors@theporch.com Fri Jan 17 14:51:11 1997
From: Karan Lee Carruth <klccarru@tenet.edu>
Subject: FS: Geiger Counter
Message-ID: <Pine.OSF.3.91.970117142511.9930A-100000@francis.tenet.edu>

Radiation Alert Monitor 4 by Heath. Three ranges: .5, 5 and 50 mr/hr. State-of-the-art detector with meter, flashing LED and switchable audio indications. Like new with manual and belt carrying case. This is perfect for checking BAs and in the event your local nuke plant melts down. $150 includes shipping in CONUS.

Lenox Carruth, WA5OVG
klccarru@tenet.edu

From boatanchors@theporch.com Fri Jan 17 20:40:33 1997
From: Mike Sanders <k0az@i1.net>
Subject: Greenlea punches for trade///Johnson paint
Message-ID: <3.0.16.19970117174501.2bb734e2@i1.net>

Greetings All, I have two extra duplicates that I would like to trade. I have a 3/4 inch round and a 1/2 inch square. The 3/4 is new in box and I believe the 1/2 inch is also new but no box. I would like to trade for other Greenlea punches of larger size round. Anyone?

If you have other Greenlea punches that you would like to sell or trade for other stuff let me know.

Blew away all email files the other night. (yep I am certifiably brilliant). If you have transactions in the works with me send me email.

I have been working on marks on the Johnson Courier amplifier maroon. This may have been listed in ER several years ago but maybe not. There were some paints mentioned in restoration tips in ER that were close. The paint I am using is Dupli-Color SF CC 366. Chrysler Corp Black Cherry. Now the deal is do not shake up the little bottle/tube. Use the internal brush but do not stir or shake up the metallic component off the bottom.

The match is "perfect" to my bespectacled eyes. Lots of rubbing with
compound to smooth out the finish will be needed but it will look very
good when finished. I did my Ranger like this some years back and I can
not tell where I touched up spots on the maroon on it.
Anyone got a bottle/can of gray off the shelf for the Johnson stuff for
touch up? Inquiring minds want to know.   73, Mike K0AZ

From boatanchors@theporch.com Fri Jan 17 09:57:03 1997
From: "Gary H. Harmon, Jr." <gharmon@txdirect.net>
Subject: Heathkit AT-1 Meter or Repair
Message-ID: <199701170434.WAA21436@legend.txdirect.net>

Here is additional information on the meter I need for the Heathkit AT-1......

2 1/4 in square, 2 in round hole, mounts to panel with a bracket on the back
of the panel, 2 scales - 0-10 and 0-100 dc milliampres, black housing, white
face with black letters. Merv/K9FD mentioned a old EMCO meter. Still
looking for suggestions on tackling the rewinding of the coil which is
mounted behind the needle, not attached to it.

Thanks in advance and 73,
gary

==
>Date: Wed, 15 Jan 1997 22:40:46 -0600 (CST)

>I have a Heathkit AT-1 with a bad meter. There is no continunity across the
>coil. I guess I need to carefully unwind the coil, count the wraps, and
>then rewind it using new wire. Is the placement of the wire critical? Does
>neatness count or is the main key the number of turns? I suspect that the
>piece of wire is wrapped in oposite directions, is this true? Any
>suggestions on how to proceed?? Better yet, does anyone have a spare meter
>that works??
>

```
<><><><><><><><><><><><><><><><><><><><>
<> TOO MANY PROJECTS, NOT ENOUGH TIME <>
<>                                    <>
<>    Gary H. Harmon, Jr., K5JWK      <>
<>        6302 Robin Forest           <>
<>    San Antonio, TX 78239-3218      <>
<>          (210) 657-1549            <>
<>       gharmon@txdirect.net         <>
<>                                    <>
<>PACK & SHIP UNTO OTHERS AS YOU WOULD<>
<>   HAVE THEM PACK & SHIP UNTO YOU   <>
<><><><><><><><><><><><><><><><><><><><>
```

From boatanchors@theporch.com Fri Jan 17 09:57:03 1997
From: Mike & Holly Steussy <hikrbikr@erols.com>
Subject: HRO receiver in the Pentagon
Message-ID: <32DEC2C6.23DE@erols.com>

There was a recent thread on HRO receivers, but I didn't see anyone refer to one on display in the Coastwatcher's display case in the ANZUS (Australia-New Zealand-US) Corridor of the Pentagon. Yesterday after work, I looked at it carefully and made some notes. Since not everyone can wander the halls there, I offer the following description.

The receiver is clearly an HRO with the National PW dial and a plug-in coil for the 2.5 - 5.0 Mc band. The NC trademark is clearly visible on the gear housing and it looks similar to the one in my RCF (NC-100 variant). The coil front has a calibration graph on it. The front panel is painted flat gray and is somewhat scarred up, looking VERY used, but still serviceable. A power supply is not built in, but there is a long metal box bolted to the rear apron from which protrude 3 pairs of binding posts and there is what appears to be an output transformer on the top of this box. The tubes were black metal that looked like 6K7/6J7s but I couldn't make out the types.

The display labels it a transceiver, but it looks like just a receiver. There is no crystal socket on the front panel or anywhere else I could see and there is no tank circuit or obvious transmitter tube visible. There is a label plate on the front panel on which is printed "Radio Receiver" and "Manufactured by Collier & Beale Ltd, Wellington NZ" The type and number are stamped on the label, but are not easily readable in the glare of the display lighting. I guessed at the type as "941 SWP" and No. as "1922."

The controls on the front panel, besides the great National dial, are on left side: ANT TUNING, CW OSC (toggle switch) CW TUNING, and RF GAIN. On the right: HEATERS (toggle switch), HIGH TENSION (toggle switch), and IF GAIN, with two PHONES jacks and a HEATERS lamp crystal. The HIGH TENSION switch puzzled me. Perhaps someone can shed light on that.

73, Mike Steussy
AE4R, Vienna VA
hikrbikr@erols.com

From boatanchors@theporch.com Fri Jan 17 14:51:11 1997
From: Bob Roehrig <broehrig@admin.aurora.edu>
Subject: Re: HRO receiver in the Pentagon

Message-ID: <Pine.ULT.3.95.970117103057.1776B-100000@admin.aurora.edu>

On Thu, 16 Jan 1997, Mike & Holly Steussy wrote:

>
> The controls on the front panel, besides the great National dial, are on left side: ANT TUNING, CW OSC (toggle switch) CW TUNING, and RF GAIN. On the right: HEATERS (toggle switch), HIGH TENSION (toggle switch), and IF GAIN, with two PHONES jacks and a HEATERS lamp crystal. The HIGH TENSION switch puzzled me. Perhaps someone can shed light on that.

Hi Mike, etc..... The HIGH TENSION switch is a B+ switch. All the HRO's and variants had one. The B+ must be turned off when changing coils. This is mainly because since some of the coil windings are in plate circuits and if the B+ was on with the coils removed, you would have screen grid voltages applied without plate voltage, which can destroy tubes. It also eliminates a lot of noise!

That receiver sounds like a cross between the real HRO and the Australian AMR-101. On the AMR101, the ANT TUNING is called AERIAL TUNING. The 101 also has a rotary switch to perform the power switching, AGC on-off, and BFO on-off functions.

E-mail broehrig@admin.aurora.edu 73 de Bob, K9EUI
CIS: Data / Telecom Aurora University, Aurora, IL
630-844-4898 Fax 630-844-5530

From boatanchors@theporch.com Fri Jan 17 14:51:11 1997
From: km1h@juno.com
Subject: Re: HRO receiver in the Pentagon
Message-ID: <19970117.130216.7095.9.km1h@juno.com>

On Fri, 17 Jan 1997 10:38:17 -0600 (CST) Bob Roehrig <broehrig@admin.aurora.edu> writes:

SNIP
>HRO's
>and variants had one. The B+ must be turned off when changing coils.
>This is mainly because since some of the coil windings are in plate
>circuits and if the B+ was on with the coils removed, you would have
>screen grid voltages applied without plate voltage, which can destroy
>tubes. It also eliminates a lot of noise!

Actually the primary reason to turn off the B+ when changing coils was to prevent arcing of the brush board contacts in the Rcvr. We used to change severely pitted ones often at National but I cannot remember anyone ever losing a tube. I feel certain that National engineers took into account the possibility of users forgetting to shut off the B+ and that there is sufficient current limiting resistance in the 3 screen circuits. After all, that same basic circuit survived over 30 years in production. And as a side note, the NC240 and its earlier cousins with the sliding coil trays also survived fine with B+ applied.

73, Carl KM1H

From boatanchors@theporch.com Fri Jan 17 14:51:11 1997
From: Avery Comarow <acomarow@usnews.com>
Subject: NC-303
Message-ID: <2.2.16.19970117132148.4a4f3d7a@pop3.usnews.com>

I'm a newbie here, but Hank and others gave me valuable advice last year on troubleshooting my Tek 547 before this became a subscriber service, and reading the traffic for a couple of weeks has made it obvious that my spiritual wellbeing depends on subscibing. So here I am.

A couple of agenda items:

1. I would love to find an NC-303 in nice shape, preferably with speaker. Many years ago I stupidly sold mine. To avoid shipping hazards, Wash./Balt. area would be best.

2. I have a couple of surplus copies of the new 2nd edition of Fred Osterman's book, Shortwave Receivers Past & Present. It sells for $19.95. I'll sell 'em as a package for $30 and throw in shipping, or $17.50 each including shipping.

Email, please.

Avery W4OGK

From boatanchors@theporch.com Fri Jan 17 09:57:03 1997
From: Terry Dobler KJ7F <kj7f@micron.net>
Subject: Need copy of HR article
Message-ID: <2.2.16.19970116223059.25af994e@pophost.micron.net>

Group,

Does some one out there have the December 1969 issue or Ham Radio that would be willing to copy an article for me. I would like to find a copy of the article by Bill Orr titled

"New Life for the Collins 51J Receiver VFO".   I'll be happy
to pay for copying and postage.

TNX, Terry KJ7F

kj7f@micron.net (Boise, Idaho) http://netnow.micron.net/~kj7f

From boatanchors@theporch.com Fri Jan 17 09:57:03 1997
From: Scott Townley <nx7u@primenet.com>
Subject: Re: Need copy of HR article
Message-ID: <1.5.4.16.19970116220545.4857f5c0@mailhost.primenet.com>

And I'll reply to the group because....
I have them ALL.
I am happy to fill copy requests...if they are a few pages, don't worry
about copying and postage. Only if I get 10000 responses for copies will I
have to do something!

Terry...send me your mailing address and I'll get you taken care of.

At 22:33 16.01.1997 -0600, Terry Dobler KJ7F wrote:
>Group,
>
>   Does some one out there have the December 1969 issue or Ham
>Radio that would be willing to copy an article for me.   I
>would like to find a copy of the article by Bill Orr titled
>"New Life for the Collins 51J Receiver VFO".   I'll be happy
>to pay for copying and postage.
>
>TNX, Terry KJ7F
>
>kj7f@micron.net (Boise, Idaho) http://netnow.micron.net/~kj7f
>
>
>

"There is no need to sally forth, for it remains true that those things
which make us human are, curiously enough, always close at hand. Resolve,
then, that on this very ground, with small flags waving and tiny blasts of
tiny trumpets, we shall meet the enemy, and not only may he be ours,
HE MAY BE US."

Scott Townley
nx7u@primenet.com

From boatanchors@theporch.com Fri Jan 17 14:51:11 1997
From: Avery Comarow <acomarow@usnews.com>
Subject: Osterman books
Message-ID: <2.2.16.19970117142245.4a4fbbd4@pop3.usnews.com>

Both copies are sold--you guys are *fast*!

Avery W4OGK

P.S. Now find me a real nice NC-303.<g>

From boatanchors@theporch.com Fri Jan 17 14:51:11 1997
From: Bill Sorsby <bill.sorsby@dlep1.itg.ti.com>
Subject: Re: overtone xtals
Message-ID: <199701171602.KAA06503@lesol1.dseg.ti.com>

At 11:10 PM 1/16/97 -0600, Jeff Herman wrote:
>I've got a 3rd overtone xtal that I want to operate on its fundamental
>freq'y. Are these type of xtals designed to perform better on that
>3rd harmonic than on their fundamental?

Hi Jeff,

I ended up with a stash of crystals a while back (no ham-band) and checked a few of the third overtone crystals for operation at the fundamental frequency. They worked just fine. A book I've got on designing crystal oscillator circuits indicates that crystals are optimized for overtone operation by minimizing other spurious responses. It didn't mention how this affected the fundamental mode so I experimented. I tried a few in my KWM-2A at the fundamental frequency and found that they worked quite well. I couldn't tell any difference between the overtone crystals operating at their fundamental and fundamental mode crystals.

FWIW, while the overtone frequency is not exactly a multiple of the fundamental, I recall that it's only a fraction of a percent different. After determining the fundamental frequency for one crystal, others were quite predictable.

Regards,
Bill Sorsby, N5BU

****
bill.sorsby@dlep1.itg.ti.com
Views expressed herein are no one's fault but mine.
****

From boatanchors@theporch.com Fri Jan 17 14:51:11 1997
From: pmills@A.crl.com (Phil Mills)
Subject: Re: overtone xtals
Message-ID: <199701171644.AA29926@A.crl.com>

Bill Sorsby wrote...

>FWIW, while the overtone frequency is not exactly a multiple of the
>fundamental, I recall that it's only a fraction of a percent different.
>After determining the fundamental frequency for one crystal, others were
>quite predictable.
>

Interesting....this explains something to me. I recently re-crystalled a Comco commercial 2-way mobile unit for 2 meter operation and the receive crystal is a 3rd overtone one. According to the Comco manual, the crystal frequency was supposed to be .006% higher (or a multiplier of 1.00006) than the desired oscillator frequency.

thanks & 73,
Phil
.
Phil Mills, AB5TH   ****   *****
pmills@a.crl.com
281-992-5762 DAYS
Friendswood, TX   (south of Houston)

From boatanchors@theporch.com Fri Jan 17 14:51:11 1997
From: berg stephen erik <z931086@corn.cso.niu.edu>
Subject: P&H?
Message-ID: <Pine.3.89.9701171405.A23672-0100000@corn.cso.niu.edu>

Since we have been discussing design philosophies of late, does anyone here have any historical knowledge of the P&H company from Lafayette, Indiana? I have one of their 6 meter transmitting converters, and it is one of the best laid out, and most reliable pieces in my collection.

73,

Steve WA9JML

z931086@corn.cso.niu.edu

From boatanchors@theporch.com Fri Jan 17 20:40:33 1997
From: km1h@juno.com
Subject: Re: P&H?
Message-ID: <19970117.164445.7095.14.km1h@juno.com>

Hello Steve,

I am using a P&H 6-150 on a daily basis in the shop and even on the air several times a week as I "air test" customer 6M conversions.
It has been however very highly modified and is now a full transverter.

- The final is now a 4CX250R which provides up to 150W output of pure AB1. Not even a tickle of grid current. The Eimac 600 series socket fits perfectly in the hole vacated by the 5894 socket. Under extended SSB/CW use the power supply never gets overheated and I have kept it all original.

- A new Pi-Net was built around easy to obtain parts.

- The 6360 output is driven thru link coupling into the final grid compartment and the "Pilot" panel position is now input tune. That control is also used to control the output from 20 to 150W for testing purposes....detuning the grid input is probably frowned upon by some but at the low 1KV B+ I have yet to harm anything.

- Yep, the 4CX250 needs air and a hole must be cut in the rear panel. I use various PVC plumbing parts to mount a small blower and feed the air into the 4CX250 grid compartment.

- A home brew RX converter built dead bug style on scrap PC board is mounted underneath. A U-310 RF Stage, a SRA-1 mixer and a 2N5109 post amp perform much better than a Rice Box xcvr. The original P&H oscillator is used with a few slight mods to provide injection.

- I could probably sketch out the details if someone is seriously interested.

- A better BA choice...less work... is the Hallicrafters HA-6 transverter. I use one of them in my primary station to drive a 1200W NCL-2000 conversion. The P&H is used mainly to drive triode conversions such as the SB200 or SB220 series of HF Heathkits.

6M is fast becoming a real popular band. I have worked 104 countries there and all on the down side of the sunspot cycle.

73...........Carl   KM1H

From boatanchors@theporch.com Fri Jan 17 20:40:33 1997
From: Karan Lee Carruth <klccarru@tenet.edu>
Subject: Radioactive Military Radios
Message-ID: <Pine.OSF.3.91.970117184554.2524A-100000@francis.tenet.edu>

Here is an updated list of known radioactive military radios, tubes, etc.

TBX	Quite hot. All except TBC-2
TBY	Quite hot.
ATD	
BC-620	Meter Markings.
BC-654	Meter Markings.
BC-659	Meter Markings.
BC-1335	
T-195	
R-392	Meter Markings. Perhaps also R-390 and R-390A
LS-166	Knob.
OA2	Okay unless broken.
OA2WA	Okay unless broken.
5651	Okay unless broken.
5651WA	Okay unless broken.
Knobs	Many knobs on Korean War era equipment have radioactive markings.
Switches	Some toggle switches have radioactive ends.
Meters	Meters in most Korean War era radios have radioactive markings. this is why you don't find them in much of the equipment - Uncle Sam is protecting you.

Aircraft Instruments - most through the 1960s are radioactive. Usually these have yellow markings. White ones are not radioactive and not all yellow markings are radioactive.

Sextants - Every bubble sextant that I have tested has been quite radioactive.

Radioactive markings should be left alone and sealed with a coat or two of clear lacquer. Do not attempt to remove them!

Lenox Carruth, WA5OVG
klccarru@tenet.edu

From boatanchors@theporch.com Fri Jan 17 14:51:11 1997
From: Avery Comarow <acomarow@usnews.com>
Subject: Ranger knobs, Hammarlund clock
Message-ID: <2.2.16.19970117152819.4a4f5b22@pop3.usnews.com>

Seeking knobs for a Ranger I and the Telechron clock for an HQ-170A.

Also seeking HV probe, preferably RCA, for RCA Senior VoltOhmyst (it's a 50KV probe with an Amphenol mic connector). Will trade for a brand new Hickok HV probe, 30KV, with box. It was never even opened until a month ago. Same Amphenol connector as the RCA VTVM.

Avery W4OGK

From boatanchors@theporch.com Fri Jan 17 09:57:03 1997
From: Don Reaves <dr@cei.net>
Subject: RCA RBC-5
Message-ID: <Pine.LNX.3.91.970117002848.12265F-100000@kc5jh.reaves.net>

An RBC-5 receiver component (CRV-46148-D), serial 617, found its way into my vehicle while I was looking over some computer stuff at the state surplus barn. This is my first experience up close with a RXX anything, and I'm impressed by the battleship construction. It weighs about 85 pounds. The only mechanical fault I can see is a busted shaft coupler for the freq. vernier control. Inside it's clean and original (surprisingly so, since it came from a votech school. What is a votech school doing with one of these?) No wax paper caps to mess with in this baby. I'd love to fire this up and cruise the SW bands with it. I need a source for a manual and power supply, and any other accessories. I have the armored power cable with the two connectors. The freq. range is 4.0 to 27.0 MC, but I think it may cover a bit of 80 meters. Any historical/perspective info appreciated, too. I've searched the BA archives. Not much has been said about the RBC's.

Don Reaves WA5BBS   dr@cei.net

From boatanchors@theporch.com Fri Jan 17 09:57:03 1997
From: William Donzelli <william@ans.net>
Subject: Re: RCA RBC-5
Message-ID: <199701171513.AA08330@interlock.ans.net>

> An RBC-5 receiver component (CRV-46148-D), serial 617, found its way into my

> vehicle while I was looking over some computer stuff at the state surplus
> barn.

That was a good find!

> Any historical/perspective info appreciated, too.

The RBA/RBB/RBC is part of a long line of receivers made by RCA for the U. S. Navy for fleet (general ship-shore) communications.

The period from 1930 thru the 1950s saw several generations of these wonderful boxes. There seems to be a bit of an RAL/RBB/RBC stir recently, so to aid those on the list that are not familiar...

RAA/RAB - late 1920s - These are odd sets, and like those that followed, split up LF and HF duties between receivers. The RAA covered the low end (10 KHz thru 1 MHz), and the RAB continued the coverage to 30 MHz. Probably the largest non-diversity receivers ever made (RAB-2 tips the scale at 405 pounds), they employed a similar construction philosophy to the National sliding coil tray. The sets remained in production into the mid thirties, and no doubt saw service into the war years.

RAK/RAL - mid 1930s - Called recently "the best CW receivers", this pair included the LF RAK and its mate, the HF RAL. They saw extensive service on many classes of ships, but were pulled out of most frontline duty during the war years dues to their leaky regenerative nature (great for submarines with DF loops!). Smaller ships and submarines still used them, but all others only kept the RAK/RALs for emergency use. Many thousands were produced by RCA and Andrea until the line ended midway during World War 2.

RBA/RBB/RBA - very late 1939 - A very successful design, including the TRF LF set (RBA), and the nearly identical RBB/RBC superhet pair to cover the HF set. They were made to replace the RAK/RAL so the ships could steam ahead with a little less trouble from enemy submarines. The trio is actually not completely RCA's design - engineers were pulled from all over to make the top notch receivers. By the middle of the war, thousands of the sets were deployed and tuned to a lions share of both ship and shore communications. The sets remained in production with RCA and Federal until the start of the 1950's (mostly RBx-5 and RBx-6 series), and some saw service for many years after.

AN/SRR-11,12,13 - late 1940s - These tried to replace the RB*s, but were dismal failures. They are beutifully built, but have serious flaws in the audio and calibration departments. They did not see service long, replaced by a number of sets, including the R-390/URRs and the AN/WRR-2s and 3s.

The Navy had other fleet receivers as well, but apparently they did not last long. For example, Hygrade-Sylvania produced the RAG/RAH pair. If anyone has any information on these sets, or any other early (1920s-1930s) Navy receivers, please contact me.

William Donzelli
william@ans.net

From boatanchors@theporch.com Fri Jan 17 14:51:11 1997
From: km1h@juno.com
Subject: Re: RCA RBC-5
Message-ID: <19970117.121641.7095.6.km1h@juno.com>

That is part of the standard Navy and CG shipboard gear fm WW2 up into the late 60's at least. The rest of the set was the RBA (VLF-LF) and RBB (LF-MF) and one PS could run 2 radios. The matching PS is the CRV-20130.

I can not remember one ever breaking down. It was a simple matter of following the PM schedule with a URM-25D sig gen and occassionally replacing a tube. We ET's were sorry to see them go and be replaced by the SRR series or the URC-32 which were frequently down for service.

73........Carl   KM1H

From boatanchors@theporch.com Fri Jan 17 14:51:11 1997
From: Ho4bart@aol.com
Subject: Re: RCA RBC-5
Message-ID: <970117134055_1758547445@emout03.mail.aol.com>

In a message dated 97-01-17 10:21:24 EST, william@ans.net (William Donzelli) writes:

<< but were pulled out of most frontline duty
 during the war years dues to their leaky regenerative nature (great for
 submarines with DF loops!). Smaller ships and submarines still used them,
 but all others only kept the RAK/RALs for emergency use >>

at risk of having my ignorance exposed again, i would submit: regen receivers with RF stages were NOT pulled from service for any reason of so-called receiver radiation. at the beginning of ww2, many very simple (e.g. 2 tube !) receivers were still in use in merchant vessels. the marine business was notorious for being cheap about the equipment kept operating -- except for passenger liners which prided themselves on having the most modern (& safest-reliable) equipment, which was also an advertising brag point. anyway, in the face of terrible allied shipping losses with the onset of war, there

ensued a panic about "receiver radiation" being DF'd by U-boats.
In england the many freighters with really basic receivers had these
exchanged for more modern receivers, which were most often regens-
but with an RF stage for isolation between the oscillating detector and
the antenna. (reference: old paperback book called "electronics made
simple" or something like that. i also own 2 UK built HF regens, year
1940 -- UK was already at war in this year. one for example is marconi
730, wood case, 3 tube plugin coils for 15 kc/s to 20 mc/s. 1940 !)
in the US, one example i can cite for sure is that Alaska Steam in
seattle changed out their remaining IP-501's (possible ## error on my
part) for the SW-3 ! (reference: alaska steam work logs, in my paper
archives, and alaska steamship co. inspection papers in my archives.)
For the US Navy: i have seen photos, and can relocate, of RAK/RAL
being used mix n match next to more modern recs in a ship radio room.
from the size of the radio room it appears to be DE, or other such size,
not CV or BB class.
also: can anyone cite an account from =ANY= U-boat account, of the
U-boat using DF equipment to home in on ship's rec? a single account?
it is true, u-boats had DF equipment, which was monitored continuously,
as was the sound equipment, passive lissening equipment. but from
accounts i have read, including ww2 german published material (e.g.
Feind Im Fadenkreuz, 1942 if i recall title correctly; "=enemy in the
crosshairs") the 500 kc/s ("600 metre distress frequency") was lissened
to to detect SOS calls from sea traffic --- which would indicate the
proximity
of allied shipping, and more prey for the predator. one account in OTB
an oldtimer recounted picking up a regen detector at 5-10 miles, no more;
i don't recall if the article declared whether this was a 0-v-1 (i.e. no RF
stage or with an RF stage; but probably without.) and there's the account
of the SS Nautilus at the northpole, sending distress from the oscillating
regen detector to the antenna. but these incidents are noteworthy for
being exceptions. try this experiment: see how far your knight kit
ocean hopper, star roamer, etc "transmits". remember the instruction
book ,tho: you may have to back off the ant coupling capacitor, or else
"suck out" (i.e. oscillator loading) will stop the oscillation. this is
less
than an efficient transmitter by far! then imagine: an rf amplifier stage
ahead of the receiver -- how far can you pick it up now? try it!
oh, i'm foaming at the mouth, excuse me. but i've lissened to
this canard for years, longsuffering quiet while everyone else accepts it as
gospel. FRENDX, an SWL journal, in a "technical article" even explained
that a regenerative receiver could get you in trouble with the FCC-- might
come & take it away, fine you , etc. (as if the FCC gave a poop what goes
on below vhf).
so, semi-facetiously i ask, was the receiver radiation bizness a scam to
justify Scott & Technical Radio Corp. selling grossly overpriced, overbuilt
radio equipment to uncle sam? (to paraphrase a section in NAVSHIPS
900105 (?? ##) Electronics Installation Procedures, " many activities

```
have recorded complaints about the Scott SLR-12......" )

okay, ready for incoming salvo!       hue miller


From boatanchors@theporch.com  Fri Jan 17 20:40:33 1997
From: William Donzelli <william@ans.net>
Subject: Re: RCA RBC-5
Message-ID: <199701172136.AA24575@interlock.ans.net>

On Fri, 17 Jan 1997 Ho4bart@aol.com wrote:

> regen receivers with RF stages were NOT pulled from service for any
> reason of so-called receiver radiation.

They were never pulled completely from ships larger than destroyers - just
allocated for emergency use only. Submarines and small ships (DEs, tenders,
etc.), of course, still used RAK/RALs, along with RBM/RBSs.

> the face of terrible allied shipping losses with the onset of war, there
> ensued a panic about "receiver radiation" being DF'd by U-boats.

All it takes is fear to persuade governments into big procurement plans,
especially when at war (or near to it).

> For the US Navy: i have seen photos, and can relocate, of RAK/RAL
> being used mix n match next to more modern recs in a ship radio room.
> from the size of the radio room it appears to be DE,  or other such size,
> not CV or BB class.

BB59 still has an RAK/RAL-5 pair for emergency in Radio Central, even past
her 1946 refit. There is a RAL in Radio 4 as well for the same purpose. The
main sets, of course, are RBA/RBB/RBCs - lots of them.

> an oldtimer recounted picking up a regen detector at 5-10 miles, no more;
> i don't recall if the article declared whether this was a 0-v-1 ( i.e. no RF
> stage or  with an RF stage; but probably without. )

You are right in that the signal is VERY weak, but it could be picked up
under ideal conditions. The Navy, of course, wanted to make sure the
chance of even the most unlikely unfortunate situation could be minimized.
Yes, they often went over the edge, and perhaps made foolish decisions.
Then again, look at how much better our capital ships and equipment were
than just about everyone else at the time.

> so, semi-facetiously i ask, was the receiver radiation bizness a scam to
> justify Scott & Technical Radio Corp. selling grossly overpriced, overbuilt
> radio equipment to uncle sam?
```

Possible...and overpriced they were! RAKs, RALs, RBAs, RBBs, RBCs - each one in the four figure area! RCA must have been sleeping with our uncle.

William Donzelli
william@ans.net

From boatanchors@theporch.com Fri Jan 17 20:40:33 1997
From: Mike Sullivan <michaels@kc2kj.k2nesoft.com>
Subject: Re: RCA RBC-5
Message-ID: <32E00CEE.4C1FE139@kc2kj.k2nesoft.com>

Don Reaves wrote:
....
> Any historical/perspective info appreciated, too. I've
> searched the BA archives. Not much has been said about the RBC's.
>
> Don Reaves WA5BBS   dr@cei.net

The RBA, RBB, and RBC receivers were used on board large capital Navy ships (Cruisers, Battleships, Carieriers, and perhaps destroyers) from about the middle (?) of WWII to the early sixties when, I guess, they were retired in favor of the RCA monstrosity that had the projection frequency display and miniture soldered-in tubes. My father has a Navy Cruise Book of the USS Salem (CA-139) that has a photo of a portion of the radio room showing a row of RBA, RBB, and RBC receivers in use onboard that heavy cruiser. Photo was taken in 1957 during Salem's last cruise prior to decommissioning.

I used to have a RBC reciever. Loved it dearly. Worked right away, has a razor sharp CW audio filter, and was amazingly stable. During my poor student days in the early Seventies I used the RBC together with a Heath HX-20 sideband transmitter on 20 sideband! Could be done.

I was always impressed with the tuning gearing of the RB series receivers. There was no backslash, mush like the gearing of the RCA AR-88 receiver. The RB series were manufactured by RCA, Camden NJ.

From boatanchors@theporch.com Fri Jan 17 14:51:11 1997
From: "Walter L. Marshall" <wmarshal@CapAccess.org>
Subject: Re: Rethoriate tubes
Message-ID: <Pine.SUN.3.91-FP.970117121906.3148C-100000@cap1.capaccess.org>

Dear Anchor persons,

I seem to remember reading about a process where you can bring more thorium to the surface of the fillament.

It involves heating the fillament above the operating
temperature to the point where the thorium migrates
to the surface. If I can find the referance again I will
post the details. I do remember that it wasn't mentioned
if this process could be done by overvoltage to the
fillament. It was mentioned that this could be done two
or three times to a tube.
Walter

From boatanchors@theporch.com Fri Jan 17 14:51:11 1997
From: km1h@juno.com
Subject: Re: Rethoriate tubes
Message-ID: <19970117.132623.7095.11.km1h@juno.com>

This would work only with the instant heating tungsten filament tubes;
predominantly high power TX types. I believe that Richard Measures, AG6K,
wrote about this several years ago in QST.
A different procedure is required for indirectly heated cathodes such as
most RX tubes and the smaller glass TX tubes as well as many of the
ceramic/metal TX power tubes. I made reference to a CQ Magazine article
about this category in a posting earlier today to the group.

73..Carl   KM1H

On Fri, 17 Jan 1997 11:42:09 -0600 (CST) "Walter L. Marshall"
<wmarshal@CapAccess.org> writes:
>   Dear Anchor persons,
>   I seem to remember reading about a process where you can
>bring more thorium to the surface of the fillament.
>It involves heating the fillament above the operating
>temperature to the point where the thorium migrates
>to the surface. If I can find the referance again I will
>post the details. I do remember that it wasn't mentioned
>if this process could be done by overvoltage to the
>fillament. It was mentioned that this could be done two
>or three times to a tube.
>   Walter
>
>

From boatanchors@theporch.com Fri Jan 17 20:40:33 1997
From: Richard Hager <rhager@millcomm.com>
Subject: Re: Rethoriate tubes
Message-ID: <32DFD947.34B@millcomm.com>

Some tube testers had a 'Rejuvenate' button that did exactly this.

As I recall, most of the time it 'worked' and some of the time it ruined the tube.

When it 'worked', it usually gave only another 6-12 months of life.
Which is still worth something, especially if the only cost is the press of a button. Still, I wouldn't expect miracles.

I believe a lot of tubes die by 'poisoning', not just lack of thoriate on the surface.

R.
--

Richard Hager

+ Ah-ha! Design Group, Inc. -
+ Precision CNC Technology, since 1991 -
+ 612-641-1797, Fax: 612-641-8681 -
+ "I just like to make things" So... -
+ ...please call Ah-ha! directly for CNC info -
+ http://www.millcomm.com/~ahha email: ahha@millcomm.com -

From boatanchors@theporch.com Fri Jan 17 20:40:33 1997
From: "Walter L. Marshall" <wmarshal@CapAccess.org>
Subject: Re: Rethoriate tubes
Message-ID: <Pine.SUN.3.91-FP.970117160612.13430E-100000@cap1.capaccess.org>

Dear Richard,
Mention was made that the controlled temperature, and time, could drive out occlusions, primarily, gas.
Walter

From boatanchors@theporch.com Fri Jan 17 20:40:33 1997
From: Richard Hager <rhager@millcomm.com>
Subject: Re: Rethoriate tubes
Message-ID: <32DFDFE8.C4D@millcomm.com>

Mention was made of controlling the temp of the cathode to no more than 2800 K.

This can be done visually with what's known as an 'optical pyrometer'

This is an instrument that contains a small lamp plus a lens to view the object under test. A pot controls the color (temp) of the bulb, and you visually compare the bulb and object for a match.

The knob controlling the lamp must be precalibrated using known-temp objects. This can actually be done fairly simply but is too long to get into here.

Also, you can make an optical thermometer using a pair of photoxsistors and a small ckt. I only know the solid state version. Perhaps Barry or someone else could offer a tube version, if anyone desires it.

R.
--

Richard Hager

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+ "I just like to make things" So... -
+ ...please call Ah-ha! directly for CNC info -
+ http://www.millcomm.com/~ahha email: ahha@millcomm.com -

From boatanchors@theporch.com Fri Jan 17 14:51:11 1997
From: sinned@VNET.IBM.COM
Subject: RF field measurements
Message-ID: <199701172017.OAA17210@uro.theporch.com>

FWIW-
I have access to a calibrated RF field strength meter and this weekend will be taking measurements around the QTH. Goal is to build and calibrate a simple junkbox FS meter as described by Conard,WS4S. I'll report the results next week.
Dennis W5FRS

From boatanchors@theporch.com Fri Jan 17 20:40:33 1997
From: "Allan Fritsche" <fritsche@msn.com>
Subject: Scopes on the Bench
Message-ID: <UPMAIL03.199701172356500182@msn.com>

Hi Gang, Ive been reading the scope vs the VOM with interest and would like to add my .00002 cents worth in. I think that a lot of the guys may be like me with limited workbench area. When I got a boat on the bench,

Signal generator, AC Meter, AC cords going everywhere, coax connections,
schematics open. lites hung over everything, dogs barking, wife calling.
I believe the mind set could be, please let me fix this thing without dragging
out the scope. Now, until recently I had a 465B (great scope) but without the
roll around stand.
I really hated to bring it out and as all know it's not to big anyway.
Now Ive got a Tec 2350 and still even thou its smaller, I still shudder when
I have to get it out of it's storage compartment.
It's got to have something to do with mind set, at least for me.

Al
fritsche@msn.com

From boatanchors@theporch.com Fri Jan 17 09:57:03 1997
From: Randy Zelick <h2rz@odin.cc.pdx.edu>
Subject: re: scopes vs VTVMs, etc
Message-ID: <Pine.PTX.3.91.970116220233.20625C-100000@odin.cc.pdx.edu>

Well if everyone else is going to express a comment on BA trouble-shooting, I guess it is my duty to jump in...

First, after reading so many comments it is clear that there are different styles of approaching trouble shooting. I find no problem here. Whatever approach works for you is the best one.

Second, the approach should be adjusted to the circumstance. The old Navy-trained electronics tech employed to take care of us scientists is a good case in point. We always concoct theories about why some piece of equipment was malfunctioning, and call down to the shop with a comment like "the framostat must have a nanosecond glitch which is circulating through unbalanced output port and clobbering the programmable attenuator". The tech was unconcerned. He would shuffle up with the same item tucked under his arm every time. The item was a Simpson VOM. He knew that 90% of the time the problem was really some simple, stupid operator problem which was easily traced with the VOM. After a few minutes with the $50K "malfunctioning" framostat he would gently inform you that BNC cable with the missing center pin might have something to do with your difficulties.

Third, I must say that I become enamoured with certain old BA test equipment and choose it not because of some real performance feature but because using the classic old instrument just makes the troubleshooting more fun. For the same reason that using an old receiver is more fun than the latest and greatest ss wonderbox. The downside of this, of course, is the old caution: if all you have is a hammer pretty soon everything starts looking like a nail. I sometimes have found myself trapped in a problem because I just didn't want to resort to some non-favorite piece of test equipment and was stubborn in my conviction that 'ol betsy can lick the problem.

So my advice to myself is to start with what you like, but move to whatever it takes to solve the problem.

Cheers,

=Randy=

R. Zelick
Dept. Biology
Portland State University
P.O. Box 751
Portland, OR 97207
503-725-3086, 503-725-3888 (fax)

From boatanchors@theporch.com Fri Jan 17 14:51:11 1997
From: Bob Roehrig <broehrig@admin.aurora.edu>
Subject: re: scopes vs VTVMs, etc
Message-ID: <Pine.ULT.3.95.970117104011.1776C-100000@admin.aurora.edu>

On Fri, 17 Jan 1997, Randy Zelick wrote:

> So my advice to myself is to start with what you like, but move to
> whatever it takes to solve the problem.

That's the bottom line! I couldn't agree more. Certainly a lot of which instrument you use (or start with) depends on the problem you are trying to solve.

Back when I was a teenager I worked in a radio/TV shop. Of all the places I worked, I learned the most there, partly because the owners (both hams and one of them got me started) were willing to teach and let me make mistakes.

In the shop, the most used test gear was either a 260 VOM, or the big RCA Master Voltohmist VTVM. Next to that was the good old Hickok tube tester. The last thing to get used was the scope - mainly used for troubleshooting sync/sweep problems in TV's.

Here at home, I have 2 scopes on the bench. Usage is probably pretty even between them and the VOM or VTVM. I only use a DMM when working on SS stuff or need to read critical low voltages with accuracy.

E-mail broehrig@admin.aurora.edu   73 de Bob, K9EUI

CIS: Data / Telecom   Aurora University, Aurora, IL
630-844-4898 Fax 630-844-5530

From boatanchors@theporch.com Fri Jan 17 14:51:11 1997
From: Richard Hager <rhager@millcomm.com>
Subject: Re: scopes vs VTVMs, etc
Message-ID: <32DFD798.44DA@millcomm.com>

Reading Bob's comments about learning his trade in a radio shop just triggered this observation....

Is it possible that the more experienced among us don't reach for the scope first because the first scopes they used were junk?

I mean, all the people that learned troubleshooting -before- 1960 or so, were stuck with horrible scopes, like the Eico's, RCA's, Heath O-x etc..

I started in the mid-60's and had a Heath O-3 or something. It was terrible. But before I was -too- set in my ways, I got my first Tek in '75. It was an old 545. What a revelation!!

Here was an instrument that would show 25mc RF right on the screen, accurately! AND it had DC response! Wow...I fell in love.

Anyway, I pretty much 'grew up' with good scopes that were useful in ALL regimes of troubleshooting, thus I always consider it my primary instrument.

Perhaps those that started earlier were ingrained with a sense of 'scopes are junk' and those patterns remain to this day.

Just a thought...

R.
--

Richard Hager

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+ http://www.millcomm.com/~ahha email: ahha@millcomm.com -

From boatanchors@theporch.com Fri Jan 17 20:40:33 1997
From: Bill Sorsby <bill.sorsby@dlep1.itg.ti.com>
Subject: Re: scopes vs VTVMs, etc
Message-ID: <199701172206.QAA29928@lesol1.dseg.ti.com>

At 02:45 PM 1/17/97 -0600, Richard Hager wrote:

>Is it possible that the more experienced among us don't reach for the
>scope first because the first scopes they used were junk?

Don't think so. The most experienced among us often have a good idea of where the problem is simply from the symptoms. They reach for the meter to test for defective components, often without needing to power up the ailing gear, a task, I might add, which an oscilloscope does not do well!

As for the "junk" scope theory: I've had two fully functional Tektronix boatanchor scopes at home for years; a 547 for over 20 years and a 549 for eight or nine years. Because of their superior triggering capabilities, these are far superior to the 545 you describe as a "good" scope. In comparison, the 545 is denigrated to "junk" status.

It is of course possible that the cause of my propensity for using a meter is because I had no access to a scope as a wee lad. For my first five years of hamming I never so much as touched a scope.

While using a scope is fun and there's no argument about an oscilloscope's versatility, scopes are often not the most efficient problem-solving tool. When I know the general area of a problem, I usually reach for a meter first. When I need to look at waveforms or monitor voltages, I fire up a scope. When I need to monitor frequency I use a frequency counter or the R-390, and so on.

Like the saying about the hammer; if the only tool you've got is a hammer, then every problem tends to look like a nail.

Regards,
Bill Sorsby, N5BU

****
bill.sorsby@dlep1.itg.ti.com
Views expressed herein are no one's fault but mine.
****

From boatanchors@theporch.com Fri Jan 17 09:57:03 1997
From: km1h@juno.com
Subject: Re: Signal Generator Suggestions?
Message-ID: <19970117.104557.7095.0.km1h@juno.com>

The URM-25D is probably one of the most popular choices for a quality generator. They do have some old age quirks but they have been documented on the list and in print. They tend to be a bit drifty on the higher frequencies but nothing that a one day warmup wont cure! The URM-25F has better stability and shows up on this list and at Fair Radio at times.

Another popular unit is the HP-606B or later; and they are sometimes available at attractive prices. A device to frequency lock later 606's was available but I cannot recollect the details. Perhaps another list reader can fill in the info.

GL and enjoy the BA's. 73, Carl   KM1H

From boatanchors@theporch.com Fri Jan 17 20:40:33 1997
From: lkayser@rideau.net (Larry Kayser)
Subject: Surplus siting.....
Message-ID: <199701180136.UAA20332@mail.peterboro.net>

Greetings:

I stopped into Ford's in Smiths Falls yesterday on my way to the city and saw two interesting BA items.

The first was a WW II era receiver in a shipping crate. The paint was a mess, it was flaking off the front panel but the radio looked interesting. If your into TRF stuff WW II era you might send them a message.

The second item was a kinda neat "Low Profile" antenna for 3-30 Mc. It lays out on the ground and handles up to 1 KW and comes with roles of wire and everything. It is BRAND NEW. It even has the manual, even the shipping case is it MINT condition. This thing looks really neat, if your into the "Low Profile" stuff this is something you should be looking into. I doubt if this thing is much more than 10 years old.

Stuff like this is getting hard to find these days. As usual I have nothing to do with Ford's place, just an interesting siting.

Larry
va3lk / wa3zia

From boatanchors@theporch.com Fri Jan 17 20:40:33 1997
From: Randyc3@aol.com
Subject: SW Rx Book
Message-ID: <970117204850_2023265700@emout10.mail.aol.com>

Regarding the new receiver book thread.. Try Amazon.comhttp://www.amazon.com
Here is their entry-
"Shortwave Receivers Past and Present"
Fred J. Osterman; Paperback; @ $9.80 each + shipping

Seems to be a great deal vs. the $19.95 quoted elsewhere.

I have only use Amazon once, but was impressed with the service.   I found my 5 year old son an obscure Beach Boys CD that I liked (in vinyl) when I was young. Curious little guy; he keeps on asking why his stereo doesn't glow in the dark like daddy's does.

From boatanchors@theporch.com Fri Jan 17 20:40:33 1997
From: provero@connix.com
Subject: Re: SW Rx Book
Message-ID: <199701180233.VAA24964@comet.connix.com>

The $9.95 Osterman book you see listed is, in all likelihood, the 1st edition (mid-eighties).

Fred Osterman *IS* Universal Radio; don't think he'd be undercutting himself that soon after the new edition was out....

P.J. "Josh" Rovero   home: provero@connix.com
Meteorologist   radio: KK1D
Oceanographer   work: rovero@sonalysts.com
Curmudgeon-at-Large   web: http://www.connix.com/~provero/

From boatanchors@theporch.com Fri Jan 17 14:51:11 1997
From: Hans Jense <jense@eos.arc.nasa.gov>
Subject: The Invention That Changed The World
Message-ID: <199701171855.KAA24548@eos.arc.nasa.gov>

Esteemed members,

Last night, while browsing at my local bookstore, the cover of this book just leaped out me from the "recently published non-fiction" table:

> Robert Buderi, The Invention That Changed The World (How a small group of radar pioneers won the second world war and launched a technological revolution), Simon and Schuster, NY, 1996, 575 pp.

The book starts more or less with the visit of the Tizzard Mission to the US in 1940, continues with the establishment of the MIT RadLab, and the subsequent development of the first succesful radar systems (the SCR-584 gun laying radar among them). In the second half of the book Buderi describes hos the RadLab scientists and engineers fared after the war, and became involved in the development of such revolutionary technologies as radio astronomy, nuclear magnetic resonance, and (Ye Gads!) the first semiconductor devices.

Altough I haven't read anything except the blurb and some snippets here and there this looks like an ideal complement to the R. V. Jones book (Most Secret War, or The Wizard War as it called in the US).

Also worth noting for BA-ers is that The Invention is part of the Sloane Technology Series in which was previously published that other recommended volume by Fisher and Fisher, Tube: The Invention of Television.

I'll keep you posted on my readings.

-- Hans

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============================================================================
Dr. G. J. Jense          |         Command & Control and Simulation Division
Senior Scientist         |            TNO Physics and Electronics Laboratory
Virtual Environments     |                        The Hague, The Netherlands
----------------------------------------------------------------------------

                         Currently on leave at:


 _           _    _______      _
| \    |    / \  /            / \        Human and Systems Technology Branch
|  \   |   /   \ \_______    /   \                 NASA Ames Research Center
|   \  |  /     \        \  /     \                Code AFH, Mail Stop 262-2
|    \_| /       \_______/ /       \            Moffett Field, CA 94035-1000


                         Phone: (415) 604-1877
                         Fax:   (415) 604-3729
                         Email: jense@eos.arc.nasa.gov

============================================================================
```

From boatanchors@theporch.com Fri Jan 17 20:40:33 1997
From: Jack Harper <jharper@bs2000.com>
Subject: Re: The Invention That Changed The World
Message-ID: <199701172307.QAA18369@lynx.csn.net>

As Dr Jense says...

>
>Last night, while browsing at my local bookstore, the cover of this book just
>leaped out me from the "recently published non-fiction" table:
>
>   Robert Buderi, The Invention That Changed The World (How a small group of
>   radar pioneers won the second world war and launched a technological
>   revolution), Simon and Schuster, NY, 1996, 575 pp.
>

I would add that this IS an excellent book -- I read the thing a month or so ago in the wee hours -- the best part, IMHO, was the section on the development of the cavity magnetron and the politics involved, between FDR and Winston himself, in getting the technology transferred to the US on the eve of the supposed invasion of Britain by Hitler ("Operation Sea Lion" -- that never, Thank God, happened).

Also -- the book gives an excellent layman's description of how the cavity magnetron actually works...

A great read...

Regards to all

Jack, KC0LR (Friend to all things Hammarlund)

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---------------------------------------------------------------------
Jack Harper                             Bank Systems 2000, Inc.
e-mail: jharper@bs2000.com              350 Indiana Street, Suite 800
voice:  303-277-1892 fax: 303-277-1785  Golden, Colorado 80401 USA

                "21st Century Financial Applications"
        Optical Cards for Bank, EBT, and Medical Applications
Visit our Web Page: http://www.bs2000.com/talos (Last Update: 960926)

      1024-bit PGP crypto key with ID: 8FB07075 created 960728
    Fingerprint: 75 DA 06 35 F8 3D AC EC 3A F2 7C 59 A1 11 A5 74
      Key available from Public Key Servers and above Web Page
---------------------------------------------------------------------
```

From boatanchors@theporch.com Fri Jan 17 20:40:33 1997
From: "D.D. Todd" <dube3@n-link.com>

Subject: Re: Troubleshooting methodologies
Message-ID: <32E049A3.4331@n-link.com>

Michael Hanz wrote:
>
> Jim Garland W8ZR said,
> > I don't know about true professionals, but for me the first thing I turn on
> > when sitting down at my workbench is an oscilloscope.

The first thing I turn on when sitting at the workbench is my brain :)
Seriously,
I do a great deal of my troubleshooting without turning on anything. It's astounding the number of problems you can solve by just keenly observing components and circuits.

73,
Dube K4DWW dube3@n-link.com

Democracy will last only as long as it takes the people to learn that they can vote themselves largess from the treasury.
De Toqueville

From boatanchors@theporch.com Fri Jan 17 20:40:33 1997
From: paul Veltman <veltman@netcom.com>
Subject: Re: Troubleshooting methodologies
Message-ID: <Pine.3.89.9701171813.A25457-0100000@netcom15>

Hi Gang,
I have one troubleshooting methodology that I NEVER violate. I turn everything on the bench off at 10:00 PM (2200 for those of you who haven't been assimilated back into the civilian world yet). Every time I manage to get into trouble is when I try to push it and get tired.

Paul WA6OKQ

From boatanchors@theporch.com Fri Jan 17 09:57:03 1997
From: Larry Boyle <lbkd6wi@calweb.com>
Subject: Tube manual
Message-ID: <32DF1171.AD2@calweb.com>

Looking for a RCA or equivalent tube manual for receiving tubes.
Would like to find one around late 50s early 60. Thanks to all
Larry B.

From boatanchors@theporch.com Fri Jan 17 14:51:11 1997
From: "Walter L. Marshall" <wmarshal@CapAccess.org>
Subject: Tube rejuvination
Message-ID: <Pine.SUN.3.91-FP.970116211305.25456C-100000@cap1.capaccess.org>

Dear Anchor Persons,

In the book "Basic Electronics" by R.G. Kloeffler & M.W. Horrell." In general, the filament or cathode may be rejuvinated by heating it for a short time (a few minutes) to 2800 degrees K and then by restoring the temperature to 2000 degrees K." He goes on to say that this reduces the torium oxide to thorium, which allows it to rise to the surface of the cathode.

I suppose this means if you could sense the temperature of a filament cathode by the color (which *is* possible.) You could apply voltage until you reach 2800K, then back it off to 2000K and it will be good?

This is supposed to work for carbonized thoriated tungsten, as well.

Walter

From boatanchors@theporch.com Fri Jan 17 20:40:33 1997
From: "Walter L. Marshall" <wmarshal@CapAccess.org>
Subject: Tube rejuvination
Message-ID: <Pine.SUN.3.91-FP.970117155444.13430B-100000@cap1.capaccess.org>

Ahchorites,

Would the heater be destroyed before the cathode reached 2800 degrees K. What is the temoerature differential between the heater and the cathode?

Walter Marshall

From boatanchors@theporch.com Fri Jan 17 09:57:03 1997
From: ARONGV@aol.com
Subject: Tube Swap?
Message-ID: <970117010248_470881561@emout15.mail.aol.com>

Hi Gang...

I guess no one has a less than perfect Johnson 275 matchbox with meter and sensor? For my needs, I don't care what it looks like.

Also, I have a brand new (no shelf time yet) pair of 4CX400A tubes with sockets and caps. Would settle for a swap of pair of 4-400, or ??? Not really interested in green stamps!!

Contact me at ARONGV@aol.com or 913-268-5973. Fax is 913-268-0461.

And thanks for all those who helped me chase down 6KD6, 7027 and 8122 tubes. It's appreciated.

Ron Wo0IZ   Kansas City

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_________________________________________________
Always willing to negotiate for a Johnson Ranger and a Valiant  or Valiant
II.
Hallicrafter collector
looking cosmetically nice firebottle rcvrs and xmtrs that deserve a second
chance at life.
--------------------------------------------------
```

From boatanchors@theporch.com Fri Jan 17 09:57:03 1997
From: Michael Crestohl <mc@shore.net>
Subject: Tube testing and rating...
Message-ID: <199701171440.JAA28159@northshore.shore.net>

Hello Everyone:

Chris K04QW raised a question about some markings found on used tube boxes. Several list subscribers responded with ideas about date codes, etc. As it happens I am in the process of sorting through my 20-odd-year accumulation of tubes and keeping those I use in presently equipment and trying to assemble a decent spares collection anticipating future acquisitions. I am using Dan Nelson's rating system where there are two figures written in a fractional format - ie: 50/75. The bottom number is the figure listed in the book as the minimum acceptable value and the top number is the reading obtained for this tube when tested.

73,

```
    .-.                                                               .-.
   /   \           .-.                                 .-.           /   \
  /     \         /   \       .-.     _     .-.       /   \         /     \
-/--Michael Crestohl W1RC ---/---\---/-\---/---\-----/-----\--mc@shore.net-\--
          \     /       \   /     `-'   `-'     \   /       \     /
           \   /         `-'                     `-'         \   /
            `-'                                               `-'
```

From boatanchors@theporch.com Fri Jan 17 14:51:11 1997
From: Rudy Salomon <rhs@pacbell.net>
Subject: Tuscon B.A. Haunts?
Message-ID: <32DFB101.62A8@pacbell.net>

I am going to be in Tuscon, AZ. during the first week of Feb. Does anyone know of any B.A. haunts in this area?

73 de Rudy Salomon - KD6NRQ

From boatanchors@theporch.com Fri Jan 17 09:57:03 1997
From: w7ni@teleport.com (Stan Griffiths)
Subject: Re: Uses for differential amplifier scope plugin
Message-ID: <199701170531.VAA29204@kim.teleport.com>

>I understand what a differential amplifier scope plugin does (channel 1
>minus channel 2 equals signal without common mode noise), but is there a
>practical use of this capability for the BA hobbyist? Can I cheat and
>float the ground input of the scope instead? (might be dangerous)
>
>Fred Powell
>c/o
>ninaw@u.washington.edu

Hi Fred,

Lots of people have floated scopes to make differential measurements. A few have actually been killed doing it, however, so you are right, it is dangerous.

Probably the most common use of differential plugins in scopes is in the biomedical research area. Researchers are always looking for signals down in the microvolt region and there is way too much 60 Hz energy on everything. The proper use of a differential amplifier allows you to cancel the 60 Hz stuff and see the microvolt signals you are looking for. Most measurements made on the heart are differential measurements. One signal is picked up on one part of the chest and another on a different part of the chest. The researcher is interested in the difference between these two signals.

I would guess differential amps would also be very useful for looking at audio input stages where the signal levels are also very low.

Not too many other uses for BAs that I know of, but Hank may have some ideas on this.

Stan w7ni@teleport.com

```
From boatanchors@theporch.com  Fri Jan 17 20:40:33 1997
From: Nina West <ninaw@u.washington.edu>
Subject: Re: Uses for differential amplifier scope plugin
Message-ID: <Pine.A41.3.95b.970117164909.68160D-100000@dante26.u.washington.edu>

Thanks again to everybody who responded to my question.  The safety
warnings about floating the ground input of the scope were welcomed and I
hope absorbed by others.  I do have some questions that were raised by
your answers:
1. Is it safe to float the ground input of a passive meter (Simpson 260),
battery-powered meter (DVM), or 2 wire plug VTVM (Heathkit V-7A)?
For safety sake I would hookup the meter, put power on the unit under
test, and then read the meter with my hands in pocket.
2. Hank Vancleef discussed using the CA (which has an A+B) and the 82
plugins for differential measurements.  Wouldn't a differential
measurement be A-B?  Also, on my 82 I see A ONLY, CHOP, ALTERNATE, and B
ONLY modes.  Am I missing something?
3. Does anyone have experience with measuring brainwaves with a boatanchor
oscilloscope?  Stan Griffith's response and his book state that the E
plugin (20kHz BW, .05mv/cm sens) was used for "biological research".

So many plugins, not enough time

Fred Powell
c/o
ninaw@u.washington.edu


On Wed, 15 Jan 1997, Fred Powell wrote:

> I understand what a differential amplifier scope plugin does (channel 1
> minus channel 2 equals signal without common mode noise), but is there a
> practical use of this capability for the BA hobbyist?  Can I cheat and
> float the ground input of the scope instead? (might be dangerous)
>
> Fred Powell
> c/o
> ninaw@u.washington.edu
>
>
>
```

```
From boatanchors@theporch.com  Fri Jan 17 20:40:33 1997
From: Terry Burge <terrybu@netman.ENS.TEK.COM>
```

Subject: wanting an HQ-120
Message-ID: <9701172140.AA20538@netman.ENS.TEK.COM>

Forwarded from rec.radio.swap. Please, contact him, not me.
Terry

>From: KIRK C SMITH <KIRK.C.SMITH@TEK.COM>
>Subject: wtb hammerlund hq-120
>Date: Thu, 16 Jan 1997 21:56:41 -0800
>Organization: Tektronix

>I had a Hammerlund HQ-120 about nine years ago and would like to find
>another one in real nice condition Does anyone have one for sale ????
>503-786-5142 Kirk

From boatanchors@theporch.com Fri Jan 17 14:51:11 1997
From: Ho4bart@aol.com
Subject: re: who can i.d. this? (Star receiver)
Message-ID: <970117123040_1377789788@emout16.mail.aol.com>

well i was certainly wrong on this one. the Star receiver i saw
was more along the lines and features of the NC-155.
hue miller

From boatanchors@theporch.com Fri Jan 17 14:51:11 1997
From: bharris@scs.philips.com (Brian Harris)
Subject: WTB: 4CX300A
Message-ID: <2dfd55d0@scs.philips.com>

With all the recent talk 4CX300A's, it reminded me I need some spares. The good news is few popular rigs used them, so they have never been in high demand to my knowledge. Of course that might also mean there aren't that many filling the junk boxes. I am open to purchases or trades.

I will greatly appreciate any positive replies or leads. Thank you.

73,

Brian Harris WA5UEK

bharris@scs.philips.com
972-596-2914 home
972-644-1610 work

From boatanchors@theporch.com Fri Jan 17 20:40:33 1997
From: Mike Toneri <toneri@ils.net>
Subject: Re: WTB: 4CX300A
Message-ID: <199701172147.QAA13818@server1.ils.net>

At 01:44 PM 1/17/97 -0600, Brian Harris wrote:
>
>With all the recent talk 4CX300A's, it reminded me I need some spares. The
>good news is few popular rigs used them, so they have never been in high
>demand to my knowledge. Of course that might also mean there aren't that
>many filling the junk boxes. I am open to purchases or trades.
>
>I will greatly appreciate any positive replies or leads. Thank you.
>

4CX300 tubes are available from several mail order dealers. The Svetlana
(Russian) brand are relatively inexpensive, come with a good warranty and
are well made.
73...Mike VE3FGU

****
Mike & Lynda Toneri   E-mail: toneri@ils.net
****

From boatanchors@theporch.com Fri Jan 17 20:40:33 1997
From: BEN NOCK <106312.1035@compuserve.com>
Subject: WWII Jap rig ident, more
Message-ID: <199701171741_MC2-F91-A1BD@compuserve.com>

After close examination of the Japanese characters on
this unknown set, I find it is not a tx as I thought
but it appears to be a transmitter/receiver.

I think it uses the UZ12c twin triode valve.
There is a marked volume control, a marked
tuning control, and the 8 pin socket, has markings for
headphones and microphone. So, a real
curious bit of kit. By the looks of the coil, its
vhf.

I look forward to hearing from someone
about it.

Cheers, Ben G4BXD

MILITARY WIRELESS IN THE MIDLANDS

From boatanchors@theporch.com Fri Jan 17 14:51:11 1997
From: BEN NOCK <106312.1035@compuserve.com>
Subject: WWII Jap rig needs identifying
Message-ID: <199701171307_MC2-F91-9645@compuserve.com>

I have acquired a Japanese tx that needs identifying.

Its a small man pack tx, single valve (missing), with
small morse key on side of case along with toggle switch
and flip switch (telephone type). The set is 7 by 3 by 4 inch
(I can't work in this metric rubbish)

On top of the set is a meter, 0-300 mA, dated Nov 1937,
and three knobs, and an 8 pin socket (mic ??)
There is a cutout on the top case through which the valve
can be inserted/removed.

So, I would be interested to know its designation, also
of course, should anyone have a circuit, I would be
grateful for a copy.

Cheers, Ben G4BXD

MILITARY WIRELESS IN THE MIDLANDS

From boatanchors@theporch.com Fri Jan 17 14:51:11 1997
From: Ho4bart@aol.com
Subject: Re: WWII Jap rig needs identifying
Message-ID: <970117140807_1244151856@emout18.mail.aol.com>

In a message dated 97-01-17 13:10:48 EST, 106312.1035@compuserve.com (BEN
NOCK) writes:

<< So, I would be interested to know its designation, also >>

say, i think you need to have another look inside. how likely is
a single tube xmtr to have a 300 mA meter on it? do you see
RF components it? you do not mention the presence of the
RF ammeter, much more common than an Ip meter on small
tx's. i wager a stack of washers that what you have is either
a landwire telegraph adjunct or more likely, a control box for
remote tx operation.   hue miller

From boatanchors@theporch.com Fri Jan 17 20:40:33 1997
From: rdkeys@csemail.cropsci.ncsu.edu
Subject: WWII Jap set. ID
Message-ID: <9701172243.AA124624@csemail.cropsci.ncsu.edu>

Your little Japanese rig sounds like the panpack vhf set that used the clone of the type 19 tube. It covered about 60-70mhz or so and was a complete single tube transceiver (after the ham 5 meter style of the mid 30's) in a small aluminum case about 5 x 8 x 3 inches with a leather cover. It is a beautifully designed little set, that would make a nice playtoy if you can get it up and running. The problem is that the headset and mike connectors are usually long gone (mine was) and the antenna is also gone (a diamond loop thing that clipped onto the set about 3 feet square).

I forget the name right off, since I gave the set to a museum collection. But, I had a Japanese student translate the markings and it was a type something or other (36 comes to mind) made from 1934 or 36 through 1945.

The thing is listed and discussed in the WWII army Captured Japanese Radio Equipment EE whateveritwas TM (green cover about 7x9 inches).

The type 19 tube was used as a detector and audio in one switch position and I think a dual oscillator or oscillator and modulator in the other position.

A small hand crank generator set was used with it for power.

The small morse key button on the side of the case was what intrigued me when I ran across the one I had at a hamfest about 10 years back.

A marvel of engineering in the mid 30's.

Good Luck

73/ZUT DE NA4G/Bob UP